



December 18, 2006

Subject: Sierra Club Comments re:
FHWA-MO-EIS-06-01-F
MoDOT Project No. J411507

To Whom It May Concern:

These comments are organized into three sections:

- A. Sierra Club Comments on the Final Environmental Impact Statement
- B. Sierra Club Assessment of MoDOT's responses to our comments on the DEIS.
- C. Concluding Comments

A. Sierra Club Comments on the Final Environmental Impact Statement

14A [1] MoDOT uses the phrase "Purpose and Need" without precisely defining it. Is it a "statement of purpose and need" or a "purpose and need study" or something else? More fundamentally, are you speaking of the "purpose and need for a study" or the "purpose and need for the project that the study is intended to justify and/or is expected to emerge from the study?" The phrase "Purpose and Need" is tossed about as if it has precise meaning. In fact, it's little more than a semantic construction intended to intimidate all but the already-initiated. Let's have a little more clarity.

14B [2] We are concerned that the FEIS is for a corridor that extends to the northwest corner of the downtown loop, whereas the intended project ends at the northeast corner of the loop. Public discussion accompanying this study has focused intently on the segment of corridor from the northeast corner of the loop to Armour Road, with that discussion revolving to an undue extent around the character of the "New Paseo Bridge." Given that no project is currently defined for the north leg of the downtown loop, we suggest that it is ill advised to grant an environmental clearance for this segment when the options are so varied and their consideration to date has been so limited. We request that any ROD coming out of this FEIS be limited to the corridor for which a specific project is proposed and funded.

14C [3] We are concerned that, while the FEIS claims to have considered a range of initial concepts (FEIS Summary, Section C), the analysis concludes that only adding highway capacity will serve

the desired ends. The analysis gives no serious consideration to devising a “comprehensive” solution to the “problems” in the corridor. MoDOT continues to fail to define and consider comprehensive solutions, favoring instead the steel and concrete approach that appears to be hard-wired into its institutional consciousness. (More on this issue below.) The FEIS acknowledges a possible role for such other strategies, but does so using unenthusiastic and tentative language: e.g., “...the preferred alternative does not preclude...”

14D [4] While we have reservations about HOV lanes per se -- preferring instead a more comprehensive approach to promoting the use of high-occupancy vehicles through pricing and incentives -- we note with interest (FEIS Summary, Section E) that MoDOT has done an “analysis” of an HOV strategy that consists of little more than pavement markings. We note that serious consideration has been given / is being given in the (currently dormant) MIS for I-70 in Jackson County to physically separate “managed lanes” with separate access ramps. The HOV analysis done for this FEIS was apparently a pretty superficial one.

14E [5] On FEIS page S-14, in a discussion of “Movement of Trucks,” the FEIS makes mention of “international trade on the I-35 NAFTA route.” We suggest that the “I-35 NAFTA route” is more a figment of the imagination and/or economic development hype than reality. Invoking such terminology introduces a clear pro-highway bias into what should be an objective study.

14F [6] We note (FEIS Summary, page S-20) that MoDOT acknowledges that “the option of closing the Paseo Bridge or other portions of I-29/35 within the study corridor during construction of the project is being considered.” However, there is no discussion of the implications for traffic congestion, or of the environmental impacts of such action. Furthermore, there is no clear indication of what actions MoDOT might take to mitigate congestion during such period. And if actions are to be taken during construction, then doesn’t it make sense to take some of those actions to mitigate congestion that currently happens almost daily in the project corridor?

14G [7] In Commitment 10 (FEIS page S-23) MoDOT pledges that it will “minimize lighting impacts. Efficient lighting and equipment will be installed, where appropriate, to optimize the use of light on the road surface while minimizing stray light intruding on adjacent properties.” Will MoDOT commit to NOT using high-mast lighting in this corridor and thereby avoid the unwanted intrusion of 24/7 light into adjoining residences?

14H [8] In Commitment 21 (FEIS page S-24) MoDOT promises to involve the public throughout the design-build process. As one of the major constituencies – along with public transit – that has been excluded from MoDOT’s community advisory group, we don’t have confidence in this commitment. We believe that, when push comes to shove, MoDOT will put completion of the project by the self-imposed deadline of October 31, 2011, over and above any and all expressions of public concern.

B. Sierra Club Assessment of MoDOT's responses to our comments on the DEIS.

Following are the Sierra Club's comments on the DEIS, submitted May 22, 2006. Interspersed are MoDOT's responses to our comments, and our subsequent responses to MoDOT's responses.

[9] – SC DEIS Comment [1] - Our fundamental concern is that this DEIS reflects an outmoded vision of the future. The DEIS assumes a need for added highway capacity using traffic forecasts that are based on outdated or inadequate assumptions about the future. The world is quite different today than in 2002 when the NDMIS was completed. Among the most relevant differences is that the price of motor fuels has more than doubled in four short years ago, due largely to the fact that global demand for petroleum is growing rapidly relative to the production capacity of the world's oil fields: we are now approaching what is widely termed "peak oil," the highest rate of oil production that will ever be possible. All forms of energy will continue to rise in price as global demand rises relative to supply, and that will inevitably influence individual and household decisions regarding where to locate with respect to employment, how far to travel to obtain goods and services and gain access to other opportunities, and what travel mode choices to make. Furthermore, the DEIS uses traffic forecasts that are based on a "trend" forecast of future land development in the region. In spite of our repeated pleas since 1990, the Kansas City region has still not addressed the problem of public and private costs inherent in its low-density character – has still not formulated and evaluated an alternate regional development scenario that would make more efficient use of public and private resources for transportation and other infrastructure, and for ongoing public and private "operating expenses."

Question 1: How can this DEIS be valid when it is based on outmoded expectations about the future and, in essence, closes its eyes to broader issues – such as future resource constraints and global warming – that so clearly indicate a need to change the way we develop our region to be more resource efficient?

MoDOT's response: [17A] The DEIS contains information and analysis using the most recent traffic forecasts and methodology developed by MARC. Information about development and travel forecast methodologies is based on the most current information available. Recent fuel price increases have increased concern regarding future resource constraints. At this time the effect of recent price increases on the amount of travel is not known. Fuel price and supply may result in shifts to higher (sic) fuel efficient vehicles or may spur technology changes rather than impact the amount of travel, or could influence trip-making. Established processes and procedures have been used in this EIS that currently do not include speculation about future resource constraints. MARC has received a similar comment on their Long Range Transportation Plan update and they are beginning to investigate how rising fuel costs may effect (sic) travel behavior.

141 SC's response to MoDOT: Our interpretation of MoDOT's response is that MoDOT acknowledges there is uncertainty ahead, but that rather than carefully consider future prospects MoDOT prefers to press full speed ahead with its gaze focused intently on the images in the rear-view mirror. The fact that MARC has not yet come to grips with the consequences of energy and other resource supply and price constraints in the future does not excuse MoDOT for also ignoring them.

[10] – SC DEIS Comment [2] - The DEIS employs a definition of purpose and need that is narrowly focused on the “problem” of congestion, and only superficially on moving people and goods. Congestion is more the result of too many vehicles using a facility than too many people or too many goods being transported. Preoccupation with vehicle counts leads to a bias toward adding capacity – if not in the minds of the study team, then certainly in the shared “mind” of public expectations. If we consider just the movement of people, congestion can be reduced at much lower total cost if fewer people travel alone and more travel with others through carpools or public transit. Furthermore, congestion is a consequence of travel distances – a consequence of sprawl. Given the same number of trips in the region, the longer those trips are on average, the greater the degree to which trips converge or intersect one another, thereby competing for road space and creating “congestion.” Congestion can be reduced if trip lengths, taken in the aggregate, are reduced.

Question 2: How can this DEIS be valid when it considers “congestion” – expressed as vehicle counts – as a principal metric rather than a more outcome-based metric such as person trips?

MoDOT’s response: [17B] The Purpose and Need was originally developed in support of the regional goals and objectives of Transportation Outlook 2030 and the Northland-Downtown MIS as well as KCMO’s (sic) “Focus” (sic) Plan.

- 14J SC’s response to MoDOT: MoDOT’s response is unsatisfactory. Rather than address the substance of our comment, MoDOT simply refers to past planning studies that have reflected the very same bias toward moving vehicles (as a proxy for moving people and goods) that our comment addresses. In summary, MoDOT’s response appears to be, “That’s the way we’ve always done it.”

[11] – SC DEIS Comment [3] - After demonstrating that other possible modal actions cannot adequately address the “congestion” problem, the DEIS identifies construction of added highway capacity as its preferred alternative. We suggest that the preferred alternative should be a comprehensive combination of strategies which, taken together, better serve the underlying transportation purpose of moving goods and providing access to opportunities for people.

Question 3: How can this DEIS be valid if the project it supports fails to be comprehensive in nature, and instead favors the needs of one class of travelers over all others?

MoDOT’s response: [17C] A study corridor was identified to serve as the limits of the study area. The study corridor was used to identify potential constraints and issues of concern. As Initial Concepts were defined for the project, the focus of the analysis narrowed. Indirect impacts are often looked at on a much broader scale as appropriate for the resource.

- 14K SC’s response to MoDOT: MoDOT’s response totally fails to address our comment.

[12] – SC DEIS Comment [4] - After concluding that the alternative to be pursued is a highway project, the DEIS delineates a maximum project “footprint” and identifies environmental factors

within that footprint. As is MoDOT's custom, the analysis is largely about avoiding environmental hazards or issues within the project area and less about addressing impacts of the project on areas outside that area. Traffic noise for nearby "receptors" is considered, but mitigation is limited to noise barriers. Little or no consideration is given to ways to actually reduce noise – e.g., through selection of pavement surface or enforcement of lower speed limits. Air emissions from traffic – both gaseous and particulate -- are largely overlooked, even though studies have documented the health consequences of living near a heavily traveled highway.

Question 4: How can this DEIS be valid when it gives little consideration to environmental impacts beyond the project footprint (other than noise, with noise barriers as mitigation), and largely ignores the health effects of gaseous and particulate emissions on nearby residents?

MoDOT's response: [17D] The Initial Area of Investigation is defined geographically on Exhibit III-1 in the DEIS. This area was defined in order to provide a way to gather data within a specific geographic location to help determine the impacts of the different alternatives that were examined. Impacts that are less easily defined, such as social and economic issues are looked at more broadly.

14L SC's response to MoDOT: MoDOT's response does not respond to the comment, and does not refute our allegation that "the analysis is largely about avoiding environmental hazards or issues within the project area and less about addressing impacts of the project on areas outside that area."

[13] – SC DEIS Comment [5] - The DEIS largely overlooks the consequences of increased highway traffic on arterial streets. Increased traffic on this highway will invariably result in more traffic on every arterial street that has an interchange, and that increase will impair the ability of such arterials to serve local access functions as they have in the past. With higher levels of traffic at interchanges, the highway becomes an even greater barrier to local traffic – vehicular, transit, bicycle, and pedestrian – that wants only to get from one side of the highway to the other.

Question 5: How can this DEIS be valid when it ignores or discounts the added "barrier effect" of adding capacity on this highway?

MoDOT's response: [17E] The preferred alternative will provide additional vehicle capacity on the interstate system which will reduce travel on the non-interstate arterial and local street system. The alternatives were tested using the regional travel model. A comparison of the model results between the No-Build and Build Alternatives indicated that with the Build Alternatives, traffic volumes were higher on I-29/35 but were less on other routes. Interchange analysis has also been done to show that traffic movements can be accommodated at ramp terminals. Bicycle and pedestrian considerations for streets that intersect with ramp terminal are discussed in the DEIS. Sidewalks will be replaced in locations where they currently exist.

14M SC's response to MoDOT: MoDOT's intent is to provide added capacity in the corridor for more traffic. This will unavoidably result in more traffic at interchanges, and this will degrade the ability of intersecting streets to carry traffic that simply wants to get from one side of this corridor to the other. The assertion that "traffic movements can be accommodated at ramp

terminals” disregards the users of intersecting arterial streets such as Armour Road: the heightened level of congestion they will experience if in a motor vehicle, and the increased danger they will experience if they are trying to walk along or across such arterial streets anywhere in the vicinity of the proposed project.

[14] – SC DEIS Comment [6] - The DEIS gives little or no consideration to non-capacity alternatives for improving the movement of people and goods. Alternatives might include such management techniques as tolling, access fees, congestion pricing, HOV priority, or even simple ramp metering to limit access during peak travel periods. (Tolls are not currently authorized in Missouri and would require legislative action, but it’s important to know their potential in order to achieve a more effective allocation of transportation dollars.) This DEIS should at least acknowledge non-capacity alternatives.

Question 6: How can this DEIS be valid when it gives little or no consideration to non-capacity strategies for improving the movement of people and goods?

MoDOT’s response: [17F] ... The comment lists a number of items that could be used as traffic management techniques. These types of strategies are considered to be part of Transportation System Management and Travel Demand Management. Both of these management approaches were considered in this EIS. None of the management techniques that are listed in the comment are precluded by the Preferred Alternative. These techniques can be implemented whenever there is a desire by the region to incorporate them and once planners analyze them for an area larger than this EIS study corridor.

14N SC’s response to MoDOT: MoDOT acknowledges that TSM and TDM strategies exist, but makes it clear that its own intent is to build additional highway capacity rather than to devise and implement a comprehensive approach to solving the “problems” identified in the corridor. Translated, MoDOT’s response says, “We build bigger highways. If somebody else wants to do something different to address the “problems” in the corridor, they are more than welcome to do so.”

[15] – SC DEIS Comment [7] - Finally, the range of issues that this DEIS leaves unresolved – location and character of river bridge(s), design of interchanges, provision for improved public transit, the nature and location of safe accommodations for non-motorized travelers, and even so basic an item as the number of lanes to be constructed – makes it impossible to judge whether this DEIS adequately addresses the resulting environmental impacts, especially those that affect adjoining communities. MoDOT promises to convene an advisory committee and to conduct further public input processes, but we are not aware that any environmental constituency is represented on that committee. Nor are we confident in the adequacy of MoDOT’s proposed processes or the legitimacy of their outcome.

Question 7: How can a Record of Decision regarding this DEIS be rendered when so many key decisions are still un-made?

MoDOT's response: [17G] The DEIS does evaluate a Preferred Alternative and other Build Alternatives which identifies (sic) a footprint that is used to perform an analysis of the impacts...."

- 14O SC's response to MoDOT: MoDOT has not responded to our comment. By stating that it has identified a "footprint," MoDOT has implicitly admitted that its concern is more to avoid assuming environmental liabilities than to minimize the environmental impacts of the ultimate project on the surrounding environment. Impacts of the ultimate project on the surrounding environment cannot be determined until the nature of that project is known. We repeat that MoDOT's community advisory committee does not include any identifiable environmental constituency, and that we are not confident of the adequacy of MoDOT's proposed processes or the legitimacy of their outcome.

C. Concluding Comments

- 14P [16] We took note that in several places (responses 15J, 15N, 15X) MoDOT responded to another commenting organization that "This EIS is not intended to and does not try to forcibly change community needs and desires through 'social engineering.'" We find this to be highly offensive. The construction of the interstate highway system itself has constituted "social engineering" – albeit perhaps without clear knowledge of the likely outcome on the part of the system's original designers. We contend that continued expansion of the interstate system, in the light of considerable knowledge of the consequences over the past half century, constitutes continued social engineering on the part of MoDOT, FHWA, and its many public and private partners.

- 14Q [17] By establishing an arbitrary deadline for completing a still-to-be-defined project, and by committing to a "design-build" process for doing so, MoDOT has taken an unprecedented risk. MoDOT's formation of a "community advisory group" – excluding environmental and transit interests, among others – has brought with it an unprecedented level of contention and disharmony between MoDOT and its many regional and local partners in the Kansas City area. (We are not privy to the community advisory group meetings, but we hear reports from others who are.) MoDOT's reputation is on the line – as is its potential to successfully take a new transportation tax proposal to Missouri voters for approval in the next few years.

s/ Ron McLinden
Co-Chair, Missouri Transportation Committee
Ozark Chapter, Sierra Club

ronmclinden@yahoo.com
3236 Coleman Road
Kansas City, Missouri 64111



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
REGION VII
Gateway Tower II, Room 200
400 State Avenue
Kansas City, KS 66101-2406
HUD Home Page: www.hud.gov

December 18, 2006

Ms. Peggy Casey
Environmental Projects Engineer
Federal Highway Administration
3220 W. Edgewood, Ste. H
Jefferson City, MO 65109

Mr. Kevin Keith
Chief Engineer
Missouri Department of Transportation
P.O. Box 270
Jefferson City, MO 65102

Dear Ms. Casey and Mr. Keith:

RE: Final Environmental Impact Statement (FEIS) – Interstate 29/35 Paseo Bridge Corridor

HUD appreciates the opportunity to comment on the FEIS for the Paseo Bridge project. We request that FHWA and MoDOT take into account the following comments.

Bicycle/Pedestrian Facility

- Notwithstanding Mo-DOT's commitment to construct a bicycle/pedestrian facility on the Heart of America Bridge by 2012 (p. S-23, item 14), the Missouri river crossing at Paseo Bridge should include design and construction of a bicycle/pedestrian facility. To
- 15A confine people to cross the Paseo Bridge for decades to come using a single mode of transportation is shortsighted. The purpose and need of the project - to efficiently and safely move people, goods and services - can be better met through an interconnected, multi-mode transportation system that includes a bicycle/pedestrian facility on the Paseo Bridge.

Environmental Justice

- HUD-assisted projects in and near the study corridor include, but are not limited to, Guinotte Manor, Riverview and Chateau Court public housing projects. The FEIS states
- 15B (p. IV-6), "The character of the neighborhoods will not be impacted by this project." It is difficult to see how this statement can be substantiated. Traffic volume for the Preferred Alternative is projected to rise to by as much as 32% in this section of the CDB North

Loop sub-corridor (DEIS, p. II-25), with 2030 design year average daily traffic (ADT) expected at 110,000 for the no-build option versus 145,000 ADT for the eight-lane alternative. Attendant with the rise in truck and auto traffic will be increased noise and a likely reduction in air quality. Noise barriers can mitigate increased noise, but noise barriers themselves are not without adverse effects; barriers can result in community isolation and unsightly visual impacts. (Noise barrier #4, for example, is projected to be 18 feet high and 2,719 feet long.) Diminished air quality could well occur from an increase in mobile source air toxics (MSATs) in this section of the sub-corridor since significant capacity is being added to the urban interstate (i.e., 145,000 ADT by the design year). Despite the challenge of assessing project-level air quality emissions for MSATs, it is not unreasonable to assume that adverse health effects may occur in this location as a result of the significant increase in projected traffic.

Given their proximity to the widened interstate, low-income and minority populations will bear a disproportionate burden of adverse noise and air quality impacts with none of the project's benefits. Unlike the primary users of the highway (through-traffic trucks and autos), low-income and minority populations will gain no "benefit" of the increased roadway capacity due to their low rates of automobile ownership (DEIS, p. IV-17; upwards of 63% of housing units where no vehicle is available). A bicycle/pedestrian facility on the Heart of America Bridge, as proposed in the FEIS, would require this population to detour two miles to reach the other side of the Paseo Bridge river landing.

Barring mitigation, environmental justice is a concern with this project. A bicycle/pedestrian facility on the Paseo Bridge would mitigate environmental justice concerns, generally, by providing this population with modal choice, access to employers in the North Kansas City industrial area, and increased recreational opportunities. Mitigation of environmental justice concerns is also recommended by improving the appearance of noise barriers through careful design and selection of materials and by extensively landscaping both sides of the barriers to soften the perceived height and scale of the barriers.

Noise

15C MoDOT's commitments in the FEIS (pp. S-22/S-25) include a statement that "noise abatement measures will be *considered* [emphasis added]..." This commitment is weak and insufficient given the known impact of projected noise with this project. Many of MoDOT's other commitments use language that "Mo-DOT will ensure," "Mo-DOT will construct," "project...will incorporate," or "control...will be accomplished." MoDOT should make a similarly strong, unambiguous commitment that noise barriers will be constructed as proposed in DEIS, Exhibit IV-4, that noise will continue to be evaluated during design, and that abatement and attenuation measures will be implemented in other noise sensitive locations as required.

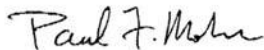
The need for further noise analysis is also suggested by a review of the information in the DEIS and FEIS. Noise modeling site #N98, for example, is a residential site in the River Market area impacted by noise (72 dBA); the table in the DEIS (Table IV-10) lists this site as a single residential unit, when in fact two buildings containing multiple residential

units are located at the site. (The two buildings together contain some 24 residential units that face the interstate.) Noise modeling site #N6 is listed as a commercial use; the site actually contains at least 12 residential units that front the interstate. Noise modeling site #N11 is a residential use, not commercial as listed in the DEIS. Noise modeling site #N91 in the DEIS shows an unexplained discrepancy between the projected noise levels for Alternative A and Alternative B. Together, these examples illustrate the need for a noise report that accurately identifies residential land uses and the number of residential units that may be impacted by noise.

A noise report should be performed to re-evaluate noise impacts and to assess whether noise attenuation is required for additional locations than those identified in the FEIS/DEIS. The report should contain noise data and exhibits from the DEIS and FEIS. (The table in the DEIS, Table IV-10, lists the data for each of the 122 noise-modeling sites, but does not key the data to a map. The map in the FEIS, Exhibit IV-4, shows noise model sites, but contains no data.) Combining this analysis into a single updated report would enable reviewers and the public to better assess the impact of noise on residential uses, particularly for the CBD North Loop sub-corridor. A map should highlight (e.g., in red) the noise modeling sites where a noise impact will occur; inclusion of a noise contour map is also recommended. The report should make recommendations regarding the use of noise insulation to mitigate noise as well as noise barriers.

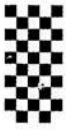
Thank you for the opportunity to provide these comments. We hope the project will result in the best possible project for the community.

Sincerely,



Paul F. Mohr
Regional Environmental Officer

cc: Macie Houston, Regional Director
Andrew Boeddecker, Director, Office of Public Housing



U.S. Environmental Protection Agency
901 North 5th Street
Kansas City, Kansas 66101

TO: Peggy Casey
Environmental Projects Engineer
Federal Highway Administration
FAX (573) 636-9283

FROM: Joe Cothorn
NEPA Team Leader
(913) 551-7148

SUBJECT: Interstate 29/35 Paseo Bridge Corridor FEIS Comments

EPA would like to stay in the loop during the design phase. The area is pretty congested with air pollution sources. Even if the stationary sources have substantial controls, the cumulative effects of additional lanes with closer proximity to residences might need a closer look.

Best Regards,
Joe



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

18 DEC 2008

Peggy Casey
Environmental Projects Engineer
Federal Highway Administration
3220 W. Edgewood, Ste. H
Jefferson City, MO 65109

Kevin Keith
Chief Engineer
Missouri Department of Transportation
P.O. Box 270
Jefferson City, MO 65102

Dear Ms. Casey and Mr. Keith:

RE: Interstate 29/35 Paseo Bridge Corridor Final Environmental Impact Statement

In accordance with our responsibilities under Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the Environmental Protection Agency (EPA) has reviewed the above referenced Final Environmental Impact Statement (FEIS). This FEIS was assigned a Council on Environmental Quality (CEQ) file number 20060473.

EPA's comments on the FEIS are focused on Mobile Source Air Toxics (MSATs). The following clarifying information is provided to assist in the preparation of the Record of Decision and to help inform the design team (contractor) on specific MSAT considerations. Depending on the proximity of human receptors to the final designs (alignments and interchange features), and in consideration of adjacent stationary sources, further investigation of MSAT impacts may be warranted. Spatial mapping of regulated air sources is provided as an enclosure. Finer map resolution can be provided as the design-build process moves forward.

1. **Summary of Impacts, Exhibit S-2b**, indicates that there are "0" Carbon Monoxide (CO) exceedances, however, this should have been reported as "not required" per the narrative on page III-8.
2. **Dispersion, page III-5**: EPA's CALINE3, CAL3QHCR, and CAL3QHCR air dispersion models are approved mobile models in 40 CFR Part 51, Appendix W (Guideline on Air Quality Models), (see Federal Register/Vol. 70, No. 216, Wednesday, November 9, 2005, 68235). These models are routinely used to model mobile sources. Air dispersion modeling could be undertaken to predict concentrations for each alternative.



16C 3. **Chapter III, Section B.1.a (page 5).** Although Mobile 6.2 is typically used to calculate emission factors for regional emission inventory development, the model has tools that can estimate emissions at a project, and also at roadway link level. Also, the use of local data when running Mobile 6.2 can greatly improve the characterization of the magnitude and distribution of air toxic emissions at a project level.

16D 4. **Chapter III, Section B.1.a (page 6).** Although there are uncertainties associated with any estimates of toxicity, scientific and health communities have broad agreement on the toxicity and adverse health impacts associated with many MSATs. Such information is routinely used by government, industry, and academia to make regulatory and non-regulatory decisions.

16E 5. **Chapter III, Section B.1.a (page 6).** The summary of existing credible scientific evidence includes toxicological information on MSATs that are available on EPA's Integrated Risk Information System (IRIS) database and other EPA recognized sources of toxicological information. The IRIS database is located at <http://www.epa.gov/iris>. The following toxicity information for the six prioritized MSATs was taken from the IRIS database Weight of Evidence Characterization summaries. This information represents the Agency's most current evaluations of the potential hazards and toxicology of these chemicals or mixtures.

Benzene is characterized as a known human carcinogen.

Acrolein's potential carcinogenicity cannot be determined because the existing data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure.

Formaldehyde is a probable human carcinogen, based on limited evidence in humans, and sufficient evidence in animals.

1,3-butadiene is characterized as carcinogenic to humans by inhalation.

Acetaldehyde is a probable human carcinogen based on increased incidence of nasal tumors in male and female rats and laryngeal tumors in male and female hamsters after inhalation exposure.

Diesel exhaust (DE) is likely to be carcinogenic to humans by inhalation from environmental exposures. Diesel exhaust as reviewed in this document is the combination of diesel particulate matter and diesel exhaust organic gases.

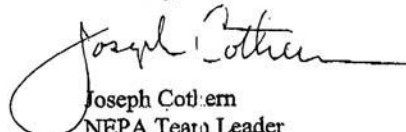
Diesel exhaust also represents chronic respiratory effects, possibly the primary noncancer hazard from MSATs. Prolonged exposures may impair pulmonary function and could produce symptoms, such as cough, phlegm, and chronic bronchitis.

16F 6. **Chapter III, Section B.1.b (page 8).** The second paragraph indicates that additional travel lanes will have the effect of moving some traffic closer to nearby homes, schools, and businesses. There are a number of studies that have found a positive relationship between proximity to highways and certain health issues and that concentrations of mobile source air pollutants are more concentrated near highways (see enclosed bibliography). EPA recommends that

involvement with residential communities be continued to gain additional information on sensitive receptors (e.g., children, elderly, chronically ill) within the project area.

If you have any questions about these comments, please contact me at (913) 551-7148.

Sincerely,



Joseph Cotler
NEPA Team Leader
Environmental Services Division

BIBLIOGRAPHY: ENVIRONMENTAL HEALTH STUDIES NEAR ROADWAYS

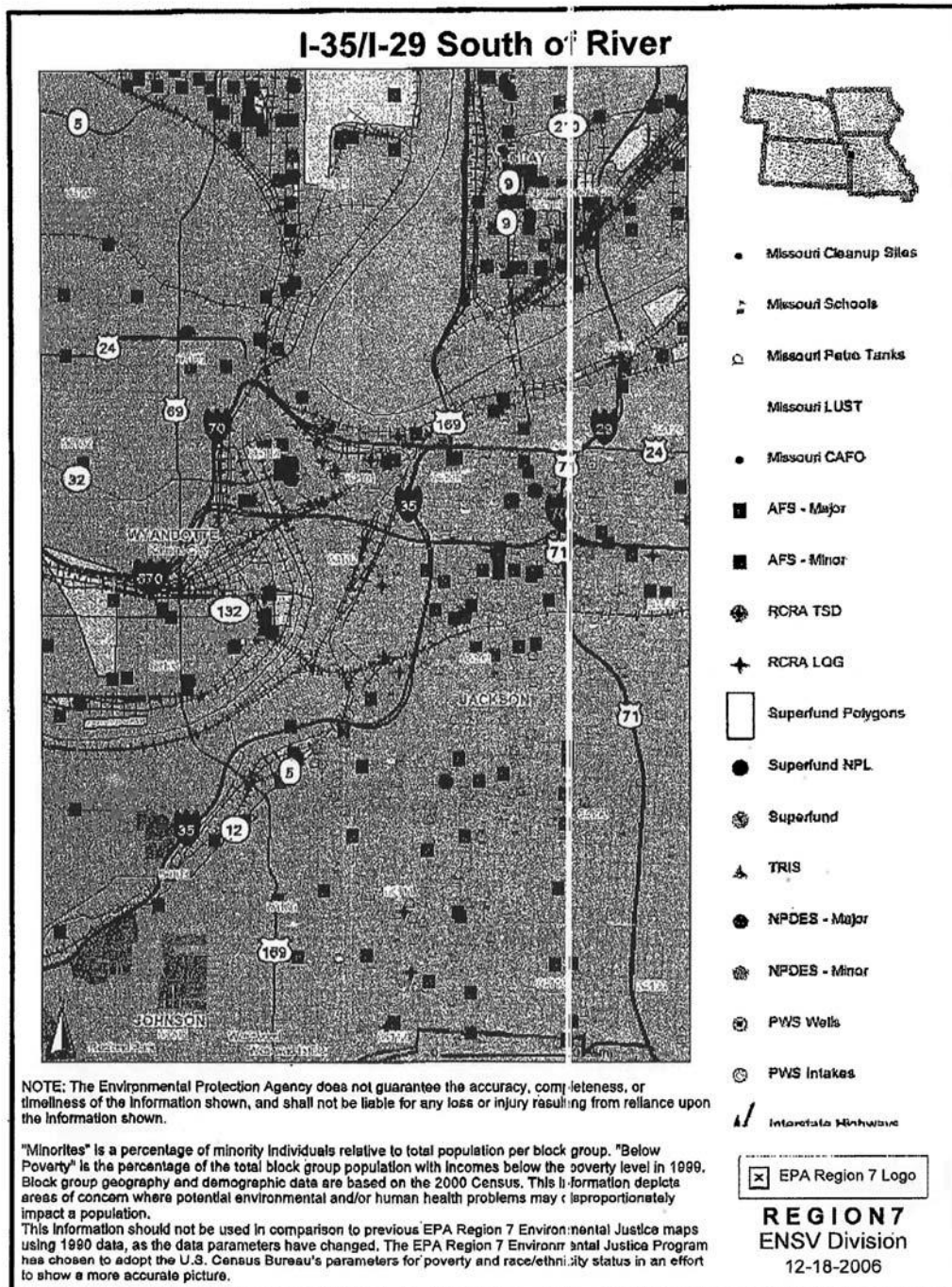
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Map Output

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